

ABSTRACT OF THE DISCLOSURE

A method for manufacturing a semiconductor optical device includes: step for forming an epitaxial growth layer containing at least an active layer which can emit light, 5 using a III-V group semiconductor material; step for forming an insulation layer over the epitaxial growth layer, which can prevent the V group element from escaping during heat treatment; step for applying heat treatment to the epitaxial growth layer at a temperature of 800 degree-C or more; step 10 for removing the insulation layer, thereby remarkably enhancing the reliability of the device.